ABSTRACT

A process is provided for producing an alkyl aromatic compound having substituents at the 3- and 5-positions by alkylating an aromatic compound having two substituents in the meta positions with an olefin having 2 to 4 carbon atoms in the presence of a Broensted acid, followed by addition of a Lewis acid and isomerization in the copresence of the Broensted acid and the Lewis acid. According to the present invention, 3,5-dimethylethylbenzene, 3,5-dimethylcumene, etc. may be produced in a stable manner with high yield and high selectivity under mild and simple reaction conditions. The alkyl aromatic compounds having substituents at the 3- and 5-positions are useful as intermediates for functional chemicals for use in pharmaceutical, agricultural and electronic materials. With the method of the present invention, the catalyst used can be recovered and recycled. Thus, desired alkyl aromatic compounds may be obtained economically in an industrially advantageous manner while reducing the load on the environment.